



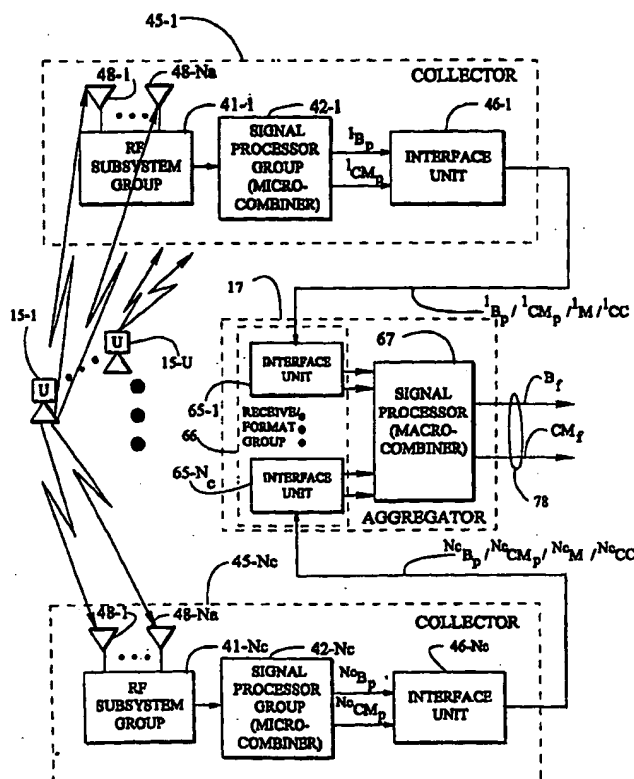
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(74) Agents: LOVEJOY, David, E. et al.; Fliesler, Dubb, Meyer & Lovejoy LLP, Suite 400, Four Embarcadero Center, San Francisco, CA 94111-4156 (US).		(88) Date of publication of the international search report: 14 May 1999 (14.05.99)

(54) Title: METHOD AND APPARATUS FOR WIRELESS COMMUNICATION EMPLOYING CONTROL FOR CONFIDENCE METRIC BANDWIDTH REDUCTION

(57) Abstract

A communication system having a plurality of forward channel communications and a plurality of corresponding reverse channel communications from and to a plurality of mobile users. A plurality of collectors are distributed at macro-diverse locations for receiving reverse channel signals from the users which are processed to yield one or more sequences of data bits as a burst and corresponding initial confidence metrics for each bit. The collectors forward these reverse channel signals including the data bits and corresponding processed confidence metrics to aggregators. The combining of multiple collector signals for the same user results in an output bit stream for the user with fewer bit errors. The system includes bandwidth control for minimizing backhaul bandwidth from collector to aggregator while maximizing signal quality.



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INTERNATIONAL SEARCH REPORT

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PCT/US 98/10816

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 H04B7/08 H04Q7/36

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 H04B H04Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category ²	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 15159 A (CELLULAR TELECOM LTD) 24 April 1997 * abstract * see page 17, line 12 - page 20, line 18 see claim 1; figure 2 ---	1,30-34
P,X	WO 97 40639 A (CELLULAR TELECOM LTD) 30 October 1997 * abstract * see page 9, line 1 - page 10, line 18 see claims 1,12; figures 1,5 --- -/--	1,30-41

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 98/10816

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E	<p>WO 98 36509 A (CELLULAR TELECOM LTD) 20 August 1998 * abstract *</p> <p>see page 9, line 21 - page 11, line 10 see page 12, line 26 - page 14, line 14; figures 1,2 see page 15, line 11 - line 27; figure 3 see page 17, line 24 - page 18, line 8; figures 4-6 see page 19, line 9 - page 21, line 15; figures 7,8 see page 23, line 4 - page 28, line 11; figures 9-14 see page 29, line 10 - line 26; figures 16-21 see page 49, line 1 - page 52, line 2; figure 22 see claims 1,2; figure 1</p>	1-34, 42-65
A	<p>EP 0 702 462 A (AT & T CORP) 20 March 1996 * abstract *</p> <p>see column 2, line 11 - column 3, line 36 see column 5, line 18 - column 6, line 52 see column 9, line 17 - line 25 see figure 1</p>	1,30-34
A	<p>EP 0 622 911 A (IBM) 2 November 1994 * abstract *</p> <p>see column 2, line 12 - column 3, line 11 see column 3, line 34 - column 4, line 29 see column 6, line 6 - line 47 see claim 1; figures 1,2,5</p>	1,30-34

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International Application No

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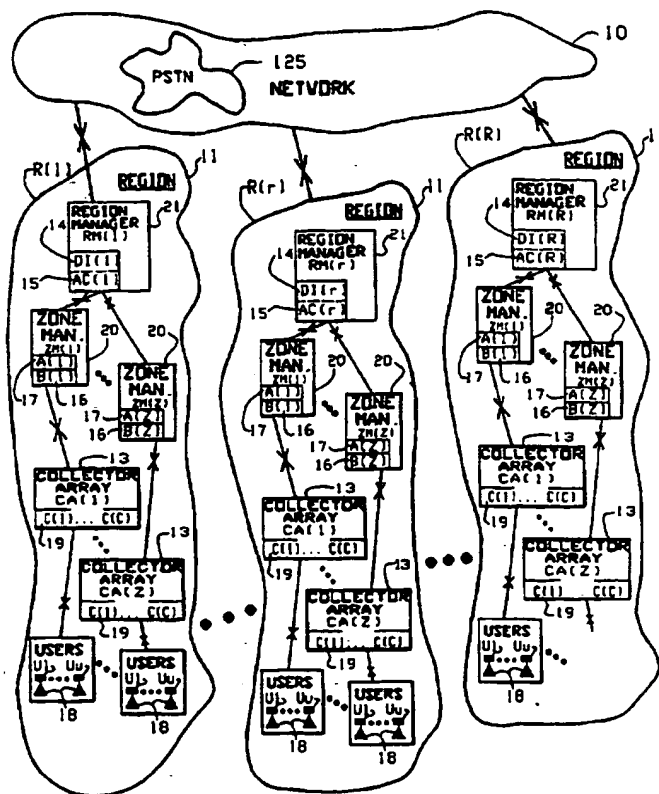
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(30) Priority Data: 08/544,913 18 October 1995 (18.10.95) US			
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(72) Inventors: HOWARD, David, Amundson; 917 Sierra Vista #J, Mountain View, CA 94043 (US). SMITH, Bruce, Denis; 238 Oak Grove, Atherton, CA 94027 (US). COATES, Karen, Evelyn; 1562 Valley Crest Drive, San Jose, CA 95131 (US). VASTANO, John, Andrew; 3431 Rambow Drive, Palo Alto, CA 94306 (US).		Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.	
(74) Agent: LOVEJOY, David, E.; Fliesler, Dubb, Meyer & Lovejoy, Suite 400, Four Embarcadero Center, San Francisco, CA 94111-4156 (US).		(88) Date of publication of the international search report: 29 May 1997 (29.05.97)	

(54) Title: METHOD AND APPARATUS FOR WIRELESS COMMUNICATION EMPLOYING COLLECTOR ARRAYS

(57) Abstract

A cellular communications system that includes forward channel communications to users and corresponding reverse channel communications from mobile users. The users travel from one area to another area over one or more zones. The forward channel communications are broadcast directly to users in a broadcaster zone. The reverse channel communications from users are not returned directly but are first collected at locations arrayed over the broadcaster zone. After collection, the reverse channel communications are forward to complete the full duplex communications. The forward channel communications are point to multipoint while the reverse channel communications are multipoint to point. The communication system separately handles the point to multipoint forward path as a direct broadcast and the multipoint to point reverse path using multiple collection points. Since the forward and reverse paths are separately configured, the present invention optimizes both the forward and reverse paths.



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INTERNATIONAL SEARCH REPORT

International Application No
PC1/US 96/17174

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 H04Q7/36

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 H04Q H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

International Application No.
PC1/US 96/17174

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	see page 1, line 5-8 see page 6, line 35 - page 7, line 23 see page 8, line 21 - page 31, line 27 --- -/--	5,9-16, 42, 46-48, 50-52, 78,79, 85,86, 92,93, 110

INTERNATIONAL SEARCH REPORT

International Application No.

PC1/US 96/17174

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